

DESIGN OF A TRAINER FOR MOVING OBJECTS USING OUTSEAL PLC NANO V.5.2

Name : M.Rio Andreansyah
Nim : 3103201257
Supervisor : Agustawan, S.ST., MT.

ABSTRACT

The use of compressed air can actually still be developed for various purposes of the production process, for example to perform mechanical movements that have been carried out by human labor, such as shifting, pushing, lifting, pressing, and so on. The purpose of this research is to make an object moving tool by utilizing a pneumatic system as a moving tool and an inductive proximity sensor as an object sensor and using a vacuum pad as a vacuum cleaner. From the results of design and testing, the overall system testing has resulted in all sensor components functioning exactly 100%. Likewise, the 12 V DC motor works as a mechanical prime mover with an average processing time of 27.47 seconds. Testing the suitability between the time set in the program with a stopwatch with an error of 15.4%, and an average error of 6.30%. Testing the suitability between the time set in the program with a stopwatch with an error of 14.1%, and an average error of 7.07%. Testing the suitability between the time set in the program with a stopwatch with an error of 8.93%, and an average error of 7.20%. Testing the suitability between the time set in the program with a stopwatch with an error of 6.15%, and an average error of 5.45%.

Keywords: *pneumatics, inductive proximity, Outseal PLC Nano V.5.2, DC Motor*